

# Oldenburgieae, a new tribe of the African Mutisieae s. l. (Asteraceae)

SANTIAGO ORTIZ

Laboratorio de Botánica, Facultade de Farmacia  
Universidade de Santiago  
15782, Santiago de Compostela, Galicia, Spain  
santiago.ortiz@usc.es

## Abstract

The new tribe Oldenburgieae (Asteraceae) is described to include the single genus *Oldenburgia* LESS., a member of the African Mutisieae s. l. *Oldenburgia* has four shrubby species restricted to the Western and Eastern Cape Province of South Africa.

## Introduction

Several phylogenetic studies using molecular markers carried out during the last years (KIM et al. 2002, PANERO & FUNK 2002, FUNK et al. 2005, PANERO & FUNK 2008) confirmed that the tribe Mutisieae s. l. is paraphyletic. In accordance with these studies and the author's own approaches (ORTIZ et al. in press, ORTIZ in press, ORTIZ et al. unpubl.) four tribes can be recognized for the 12 genera currently known within the African Mutisieae s. l.: 1) Dicomeae PANERO & FUNK with the genera *Cloiselia* S. MOORE, *Dicoma* CASS., *Erythrocephalum* BENTH., *Gladiopappus* HUMBERT, *Macledium* CASS., *Pasaccardoa* KUNTZE, and *Pleiotaxis* STEETZ; 2) Tarchonantheae KOSTEL. with *Brachylaena* R. BR. and *Tarchonanthus* L.; 3) Mutisieae CASS. s. str. with *Gerbera* L. and *Perdicium* L. The fourth is Oldenburgieae, a tribe which is described here, with the sole genus *Oldenburgia* LESS. *Oldenburgia* is situated in an isolated clade within a monophyletic unresolved Carduoideae (FUNK et al. 2005, ORTIZ et al. unpubl.) or it is the sister group of Tarchonantheae (PANERO & FUNK 2008, ORTIZ et al. in press, ORTIZ in press), a tribe from which *Oldenburgia* is distinctly different from a morphological point of view (ORTIZ in press).

## Description

### **Oldenburgieae S. ORTIZ, trib. nov.**

Typus: *Oldenburgia* LESS. in *Linnaea* 5: 252 (1830).

Suffrutices pulviniformes vel arbusculae, foliis alternis, integris, coriaceis; capitulisque solitariis, magnis, radiatis, floribus quidem radii bilabiatis, disci autem plerumque actinomorpha; cypselae denique lineares vel anguste ellipsoideae, vilano barbellato aut plumoso.

Dwarf cushion-forming shrubs to small trees. Leaves alternate, entire, mainly coriaceous. Involucre campanulate to urceolate, pluriseriate; phyllaries coriaceous and acuminate, pungent, white-tomentose. Receptacle flat, alveolate, epaleate. Capitula large, solitary or on sparsely ramified peduncles, heterogamous radiate. Marginal florets white, bilabiate with the inner lip of two linear-coiled lobes, with sterile stamens and the style as in disc florets; disc florets very numerous (80–1000), white, cream or pinkish-brown, often actinomorphic, rarely slightly zygomorphic, with narrow tube and limb, deeply 5-lobed; anthers 5, caudate and calcarate, with long tapering tails, ramified, with obtuse branches, these being retrorse along the tail and antrorse at the apex; apical appendage acuminate; endothecial tissue polarized; pollen grains smooth to echinate; style with very short branches, rounded at the apex, smooth to papillose, rarely with apical acute sweeping hairs, the stigmatic area covering the entire ventral side. Cypselae narrowly ellipsoid to linear, ribbed, glabrous to densely hairy, with barbellate to plumose pappus, testa of *Gochmatia* type (GRAU 1980).

As pointed out above the tribe Oldenburgieae includes the sole genus *Oldenburgia*, endemic to the Cape Province of South Africa. *Oldenburgia* comprises the four following species: *O. grandis* (THUNB.) BAILL., *O. intermedia* BOND, *O. papionum* DC., and *O. paradoxa* LESS. (BOND 1987).

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